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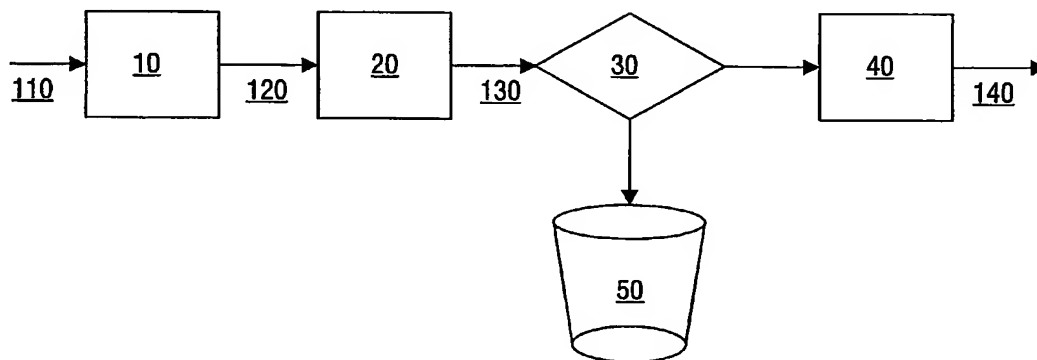
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(54) Title: DETECTION OF A WATERMARK IN A DIGITAL SIGNAL



(57) Abstract: Watermark detectors have a buffer in which a number of image tiles are folded and accumulated prior to computing the correlation between buffer contents and the watermark pattern being looked for. The intention of the folding and accumulation process is to average out the video content while accumulating the embedded watermark energy. This no longer appears to hold for strongly compressed video, such as DIVX, which exhibits a lot of artificial noise and undesired similarity (block patterns). As a result thereof, correlation peaks are often below the threshold. In a similar manner, the compression affects scale detection. According to this invention, only frames (or parts thereof) that are not so heavily compressed and therefore have a high probability of carrying enough watermark energy are folded and accumulated. To this end, a quality metric is calculated, the quality metric being indicative of the degree of compression of the data. The quality metric may be calculated based on the compressed data itself or derived from the decompressed base-band data. An advantageous example is the number of non-zero DCT coefficients of a (residue) frame. A determination is then made as to whether to exclude the frame (or part thereof) from the watermark decode process. The quality metric may also be used to select data for use in a scale detection process.

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